$$(1) \qquad CF_3CH_2OH$$

$$(2) \qquad Candida \ antarctica \ lipase \ Cool \ DMAP \ O^{\circ C} \circ -CH_2 \cdot CF_3 \ Dioxane, 60^{0}C \ O_{OH} \ Horseradish peroxidase$$

$$(3) \qquad (4) \qquad Hooken \ Hoo \ O^{\circ C} \circ -CH_2 \cdot CF_3 \ Dioxane, 60^{0}C \ O_{OH} \ Hooken \ Hoo \ O_{OH} \ Hoo \ O_{OH} \ Hooken \ Hoo \ O_{OH} \ O_{OH}$$

Figure 2

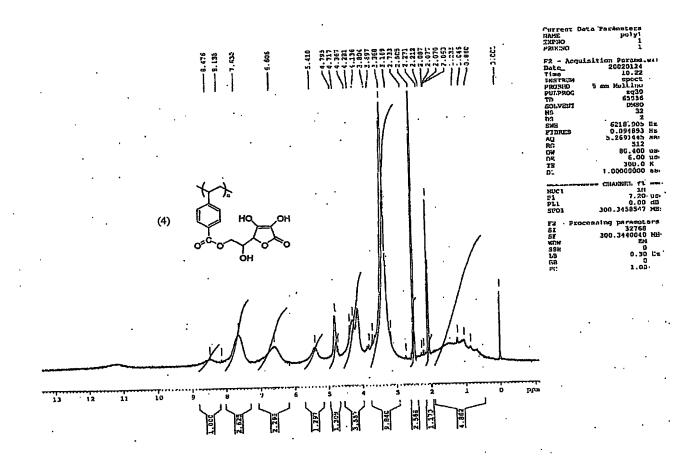
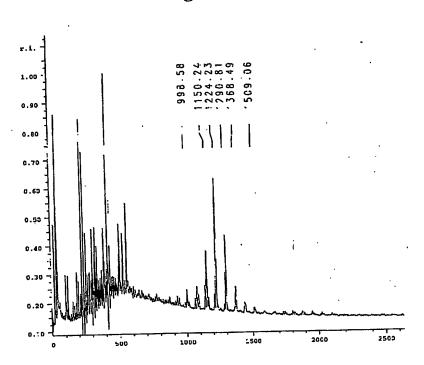
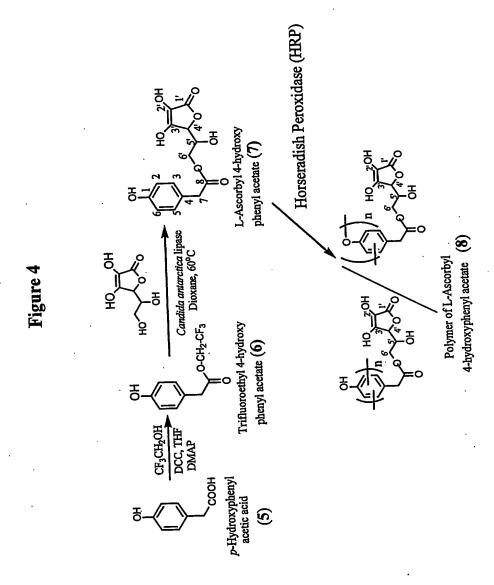
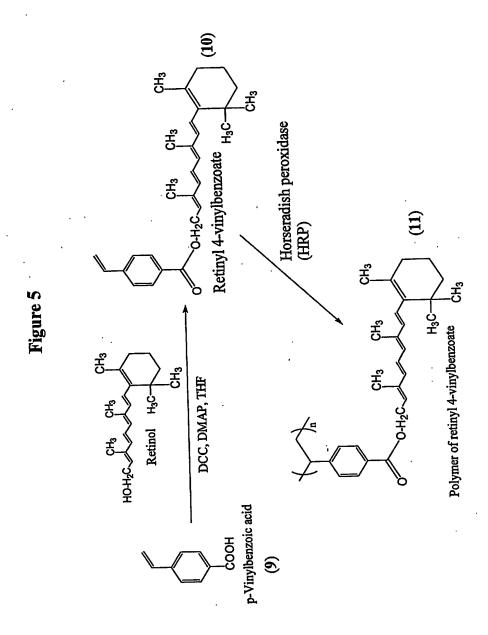


Figure 3







Figure

Figure

R= -CH₃ -CH₂-CH₂-CH₂-CH₃ -CH(C₂H₃)-CH₂-CH₂-CH₃ -C₃H₁₉ -C₃H₁₇ -CH=CH-CH₃ -CH=CH-C₆H₃ -C₂H₃ -C₂H₃ -CH₂-(CH₂)₁₅-CH₃ -C (CH₃)₃ -CF₃

Figure 10

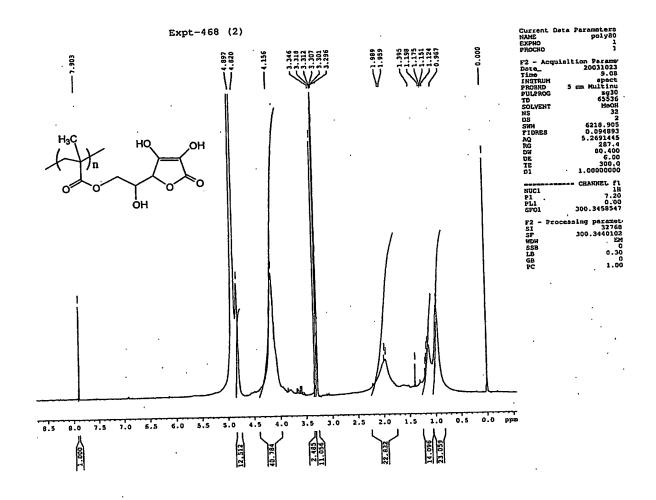


Figure 11

Figure 12